IN THE CLAIMS:

Please cancel claims 1-19, amend claims 20, 27, 29, 30, and add new claim 37, so that a complete set of the pending claims will read as follows:

1-19. (Canceled)

20. (Currently Amended): A method for changing a frequency of a central processing unit (CPU) under the control of a neural network of a computer system, wherein the neural network comprises m basis functions, the method comprising steps of:

(i) executing a learning procedure, step (i) comprising:

providing p dummy environmental parameters including data accessing conditions for an Intelligent Drive Electronics (IDE) controller, an Accelerated Graphics Port (AGP) interface, and a Peripheral Component Interconnect (PCI) interface;

providing a ~~pseudo~~ dummy output vector; and

calculating m basis weights by the neural network according to the p ~~pseudo~~ dummy environmental parameters and ~~pseudo~~ the dummy output vector; and

(ii) executing an application procedure, step (ii) comprising:

providing n environmental parameters that affect usage rate of the CPU with respect to components of the computer system when the CPU operates at a first frequency based on an external frequency;

calculating m basis vectors by substituting the n environmental parameters into the m basis functions;

calculating an output vector according to the m basis weights calculated in the learning procedure and the m basis vectors, wherein the output vector is determined according to a weighted sum of the m basis vectors with the m basis weights;

determining a clock multiplier factor according to the output vector; and

changing the frequency of the CPU according to the output vector by enabling the CPU to operate at a second frequency according to the clock multiplier factor and the external frequency, wherein m, n and p are positive integers.

21. (Original): The method of claim 20, wherein the neural network is a radial neural network.

22. (Original): The method of claim 20, wherein the basis functions comprise a radial basis function.

23. (Original): The method of claim 22, wherein the radial basis function is a Gaussian function.

24. (Original): The method of claim 22, wherein the radial basis function is a multiquadric function.

25. (Previously Presented): The method of claim 20, wherein the dummy environmental parameters comprise a clock multiplier factor that the CPU uses currently.

26. (Previously Presented): The method of claim 20, wherein the dummy environmental parameters comprise a clock multiplier factor that the CPU uses previously.

27. (Currently Amended): The method of claim 20, wherein ~~the dummy environmental parameters comprise a~~ in step (i), the data accessing condition for [[an]] the IDE ~~(Intelligent Drive Electronics)~~ controller is a dummy environmental parameter with respect to data access of the IDE controller.

28. (Previously Presented): The method of claim 20, wherein the dummy environmental parameters comprise a data accessing condition for a DMA (Direct Memory Access) controller.

29. (Currently Amended): The method of claim 20, wherein ~~the dummy environmental parameters comprise a~~ in step (i), the data accessing condition for [[an]] the AGP ~~(Accelerated Graphics Port)~~ interface is a dummy environmental parameter with respect to data access of the AGP interface.

30. (Currently Amended): The method of claim 20, wherein ~~the dummy environmental parameters comprise a~~ in step (i), the data accessing condition for [[a]] the PCI ~~(Peripheral Component Interconnect)~~ interface is a dummy environmental parameter with respect to data access of the PCI interface.

31. (Previously Presented): The method of claim 20, wherein the environmental parameters comprise a clock multiplier factor that the CPU uses currently.

32. (Previously Presented): The method of claim 20, wherein the environmental parameters comprise a clock multiplier factor that the CPU uses previously.

33. (Previously Presented): The method of claim 20, wherein the environmental parameters comprise a data accessing condition for an IDE (Intelligent Drive Electronics) controller.

34. (Previously Presented): The method of claim 20, wherein the environmental parameters comprise a data accessing condition for a DMA (Direct Memory Access) controller.

35. (Previously Presented): The method of claim 20, wherein the environmental parameters comprise a data accessing condition for an AGP (Accelerated Graphics Port) interface.

36. (Previously Presented): The method of claim 20, wherein the environmental parameters comprise a data accessing condition for a PCI (Peripheral Component Interconnect) interface.

37. (New): A method for changing a frequency of a central processing unit (CPU) under the control of a neural network of a computer system, wherein the neural network comprises m basis functions, the method comprising steps of:

(i) executing a learning procedure, step (i) comprising:

providing p dummy environmental parameters including dummy environmental parameters with respect to data access of a storage drive controller of the computer system, a graphical display interface of the computer system, and a peripheral component interface of the computer system;

providing a dummy output vector; and

calculating m basis weights by the neural network according to the p dummy environmental parameters and the dummy output vector; and

(ii) executing an application procedure, step (ii) comprising:

providing n environmental parameters that affect usage rate of the CPU with respect to components of the computer system when the CPU operates at a first frequency based on an external frequency;

calculating m basis vectors by substituting the n environmental parameters into the m basis functions;

calculating an output vector according to the m basis weights calculated in the learning procedure and the m basis vectors, wherein the output vector is determined according to a weighted sum of the m basis vectors with the m basis weights;

determining a clock multiplier factor according to the output vector; and

changing the frequency of the CPU according to the output vector by enabling the CPU to operate at a second frequency according to the clock multiplier factor and the external frequency, wherein m, n and p are positive integers.